

## REMARKS

Applicants submit the present Amendment in response to the Office Action mailed February 2, 2007. Applicants appreciate the allowance of Claims 12, 15-16, 18-21 and 50-64, and the indication that Claims 25 and 26 are directed to allowable subject matter. Applicants have amended Claims 30 and 31 to address the informalities identified in the Office Action. Applicants appreciate the Examiner bringing these informalities to Applicants' attention. Applicants have also rewritten Claim 25 into independent form, so that Claims 25 and 26 are in condition for allowance. Applicants have further rewritten Claim 24 into independent form, and have added new dependent Claims 65-69. For the reasons discussed below, Applicants respectfully submit that all of the pending claims are now in condition for allowance.

### I. The Rejections of Claims 22-23, 28-29 and 31

Claims 22, 28-29 and 31 stand rejected under 35 U.S.C. § 102(b) as being anticipated by newly cited U.S. Patent No. 6,157,065 to Huang et al. ("Huang"). Claim 23 stands rejected under 35 U.S.C. § 103(a) as being obvious over Huang in view of U.S. Patent No. 6,518,113 to Buynoski ("Buynoski"). Applicants have amended independent Claim 22. As amended, Claim 22 recites:

22. A semiconductor device comprising:

a semiconductor substrate;

a first gate line and a second gate line on the semiconductor substrate, the first and second gates lines being collinear and spaced apart from each other, the first gate line including a first gate electrode stacked on a first gate insulation pattern, and the second gate line including a second gate electrode stacked on a second gate insulation pattern; and

a conductive line pattern on the first and second gate lines, wherein the conductive line pattern has a first portion parallel to the first gate line and a second portion parallel to the second gate line, and wherein the conductive line pattern electrically connects the first and second gate electrodes with each other.

The Office Action states that, in Fig. 4E of Huang, the gate oxide layer and polysilicon layer 404 comprise first and second gate lines, and that the metal silicon layer 414 comprises a

conductive line pattern that is on the first and second gate lines. As noted above, Applicants have amended Claim 22 to recite that "the first and second gates lines [are] collinear." Support for this amendment may be found, for example, in Fig. 11 and at page 11, lines 11-14 of the present application. Applicants respectfully submit that Huang does not teach or suggest providing collinear first and second gate lines as recited in amended Claim 22, nor would there be any reason to modify Huang to have such a configuration. As such, the rejection of Claim 22 as anticipated by Huang should be withdrawn.

Claims 23, 28-29 and 31 depend from Claim 22, and hence are patentable for at least the reasons, discussed above, that Claim 22 is patentable over the cited references. In addition, Applicants respectfully submit that at least Claim 28 is independently patentable over the cited art. In particular, the Office Action states that Fig. 4E of Huang discloses that "the first portion of the conductive line pattern is at least the same length as the first gate line, and the second portion of the conductive line pattern is at least the same length as the second gate line" as recited in Claim 28. However, Fig. 4E shows the width of the identified "gate lines" as opposed to the length, as is clear from the locations of the source and drain regions 406 and 410. Accordingly, Huang fails to disclose or suggest the recitation of Claim 28.

## **II. The Rejections of Claims 24, 27 and 30**

Claims 24, 27 and 30 stand rejected under 35 U.S.C. § 103(a) as being obvious over Huang in view of U.S. Patent No. 6,518,113 to Buynoski ("Buynoski"). Applicants have rewritten Claim 24 into independent form, and amended Claim 27 to depend from Claim 24 and to recite that "the conductive line pattern is also disposed on the interlayer dielectric between the first and second gate lines." Applicants respectfully traverse the rejections of Claims 24 and 30 for the following reasons.

The Office Action states that Huang at Col. 3, lines 23-32 discloses that the first and second gate lines comprise a metal silicide layer, pointing to element 414 of Huang. (Office Action at 4). However, the Office Action already is applying layer 414 as the "conductive line pattern", and hence layer 414 cannot also be part of the "first and second gate lines." With respect to Claim 30, the Office Action states that layer 414 bridges a gap in the metal

silicide layer. (Office Action at 4). However, once again, the Office Action is treating layer 414 as both the metal silicide layer and a layer that bridges a gap in a metal silicide layer. Accordingly, the rejections of Claim 24, and Claims 27 and 30 which depend therefrom, should be withdrawn for at least these reasons.

In addition, Applicants respectfully submit that at least Claim 27 is independently patentable over the cited art. In particular, it is not clear how or why the interlayer dielectric 122 of Buynoski would be used in the device of Huang. In fact, given the fabrication method disclosed in Huang, it is unclear how the device of Huang could even be formed if the interlayer dielectric of Buynoski was included therein. As such, Applicants respectfully submit that one of skill in the art would not have been motivated to include the interlayer dielectric 122 of Buynoski in the device of Huang. In addition, Applicants submit that the cited references do not disclose a conductive line pattern that is "disposed on [an] interlayer dielectric between the first and second gate lines" as recited in amended Claim 27. Accordingly, the rejection of Claim 27 should be withdrawn for these additional reasons.

### III. New Claims 65-69

Applicants have added new dependent Claims 65-69. Applicants respectfully submit that each of these claims are patentable as depending from a patentable base claim. In addition, Applicants submit that each of Claims 65-69 is also independently patentable over the cited art. Accordingly, Applicants respectfully request allowance of new Claims 65-69.

Respectfully submitted,



D. Randal Ayers  
Registration No. 40,493  
Attorney for Applicants

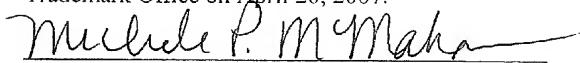
**Customer Number 20792**

Myers Bigel Sibley & Sajovec, P.A.  
P.O. Box 37428  
Raleigh, NC 27627  
919-854-1400  
919-854-1401 (Fax)

In re: Gyu-Ho Lyu, et al.  
Application Serial No.: 10/777,297  
Filed: February 12, 2004  
Page 12

**CERTIFICATION OF ELECTRONIC TRANSMISSION UNDER 37 CFR § 1.8**

I hereby certify that this correspondence is being transmitted electronically via EFS to the U.S. Patent and Trademark Office on April 20, 2007.



Michele P. McMahan

Date of Signature: April 20, 2007.